

# BTS 80EMB/C 1-1/2" OFFSET PACKAGE



**1** Prepare closer for installation.  
Center closer in cement case. Tighten MOUNTING SCREWS.

**2** Install closer, cement case and conduit in floor.  
Pull solenoid wire thru conduit. (CONDUIT SUPPLIED BY OTHERS)  
Attach conduit to conduit connector on end of cement case.

Top of cement case must be flush with FINISHED floor. Cement case must be LEVEL and installed PARALLEL to frame. Spindle center line must be accurately located. Grout cement case in place.

**3** Install top pivot.  
Remove set screw, cover cap, pivot pin and then install top pivot.

FRAME PORTION  
SET SCREW  
1/8" HEX KEY  
DOOR PORTION  
PIVOT PIN  
UNDERCUT  
COVER CAP

**4** Install bottom arm.

BOTTOM OF DOOR  
BOTTOM ARM

**5** Slide washer over tapered square end of spindle until fully seated in groove. Fasten spindle with spindle screw provided. Tighten securely with 5mm HEX KEY.

SPINDLE SCREW  
SPINDLE  
WASHER

**CRITICAL**  
WASHER MUST BE INSTALLED.

**6** Install door.  
With door parallel to frame, place bottom arm onto closer spindle. Align door and frame portions of top pivot. Install pivot pin, set screw and cover cap. (See step #3) Install cover cap over bottom arm with screw provided.

**7** Adjust bottom door clearances. (If necessary)  
Closer can be raised approximately 5/32" within the cement case. Loosen fastening screws "A". Turn height adjustment screws "B" clockwise until desired height is obtained.  
**(NOTE: CLOSER MUST REMAIN LEVEL.)**  
Re-Tighten fastening screws "A". If more clearance is necessary, change spindle to appropriate size.

**8** Adjust closing speed.

INCREASE ↶

DECREASE ↷

VALVE "A" - controls closing speed from approx. 175°-0°.  
VALVE "B" - controls closing speed from approx. 7°-0°.

**9** Sealing compound. (OPTIONAL)  
Sealing compound is recommended for exterior doors or areas with excessive moisture. Make all final location adjustments before adding compound. Refer to instructions packed with compound for full details.

**10** Install cover plate or threshold.  
Trim cover plate as required to match profile of pivot jamb. Install cover plate with four screws provided. Press tab in place behind spindle. If threshold is installed, do not anchor threshold to closer body since closer is adjustable within cement case.

TAB  
QTY (4)

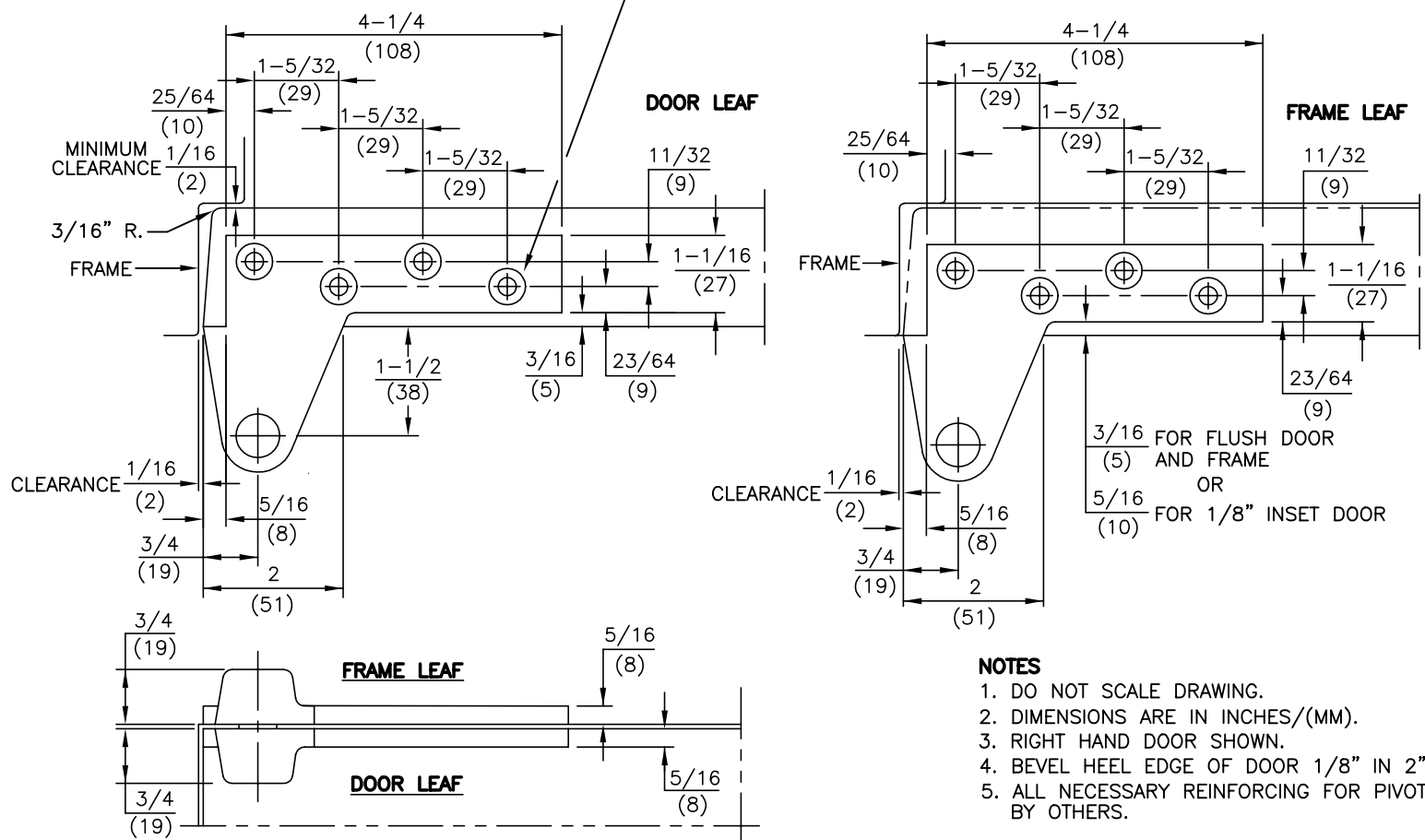
**11** If intermediate pivot is to be used, refer to installation instructions packed with pivot.

**12** OPERATION:  
When BTS 80EMB is energized, door will hold open at any point between approximately 80° and 180°. Allow for approximately 4" of fall away when considering hold open position. To release door from hold open, manually pull door closed a few inches.  
When de-energized, the BTS 80EMB operates as a standard floor closer.

ELECTRICAL SPECIFICATIONS:  
Operating Voltage: 24 Volts DC ( 10% ) Max. allowable residual  
Input Current: 125 MA Ripple 30%

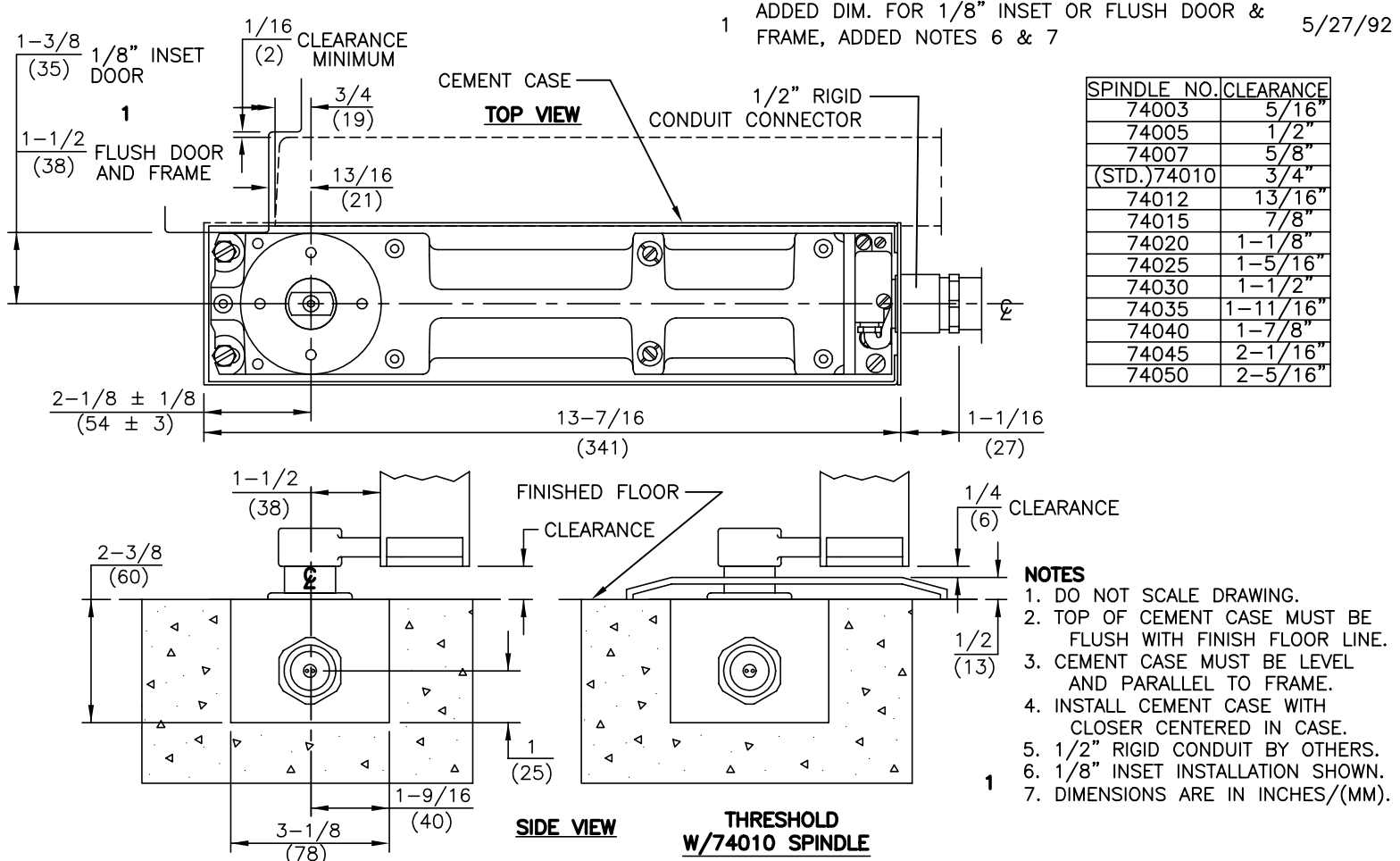
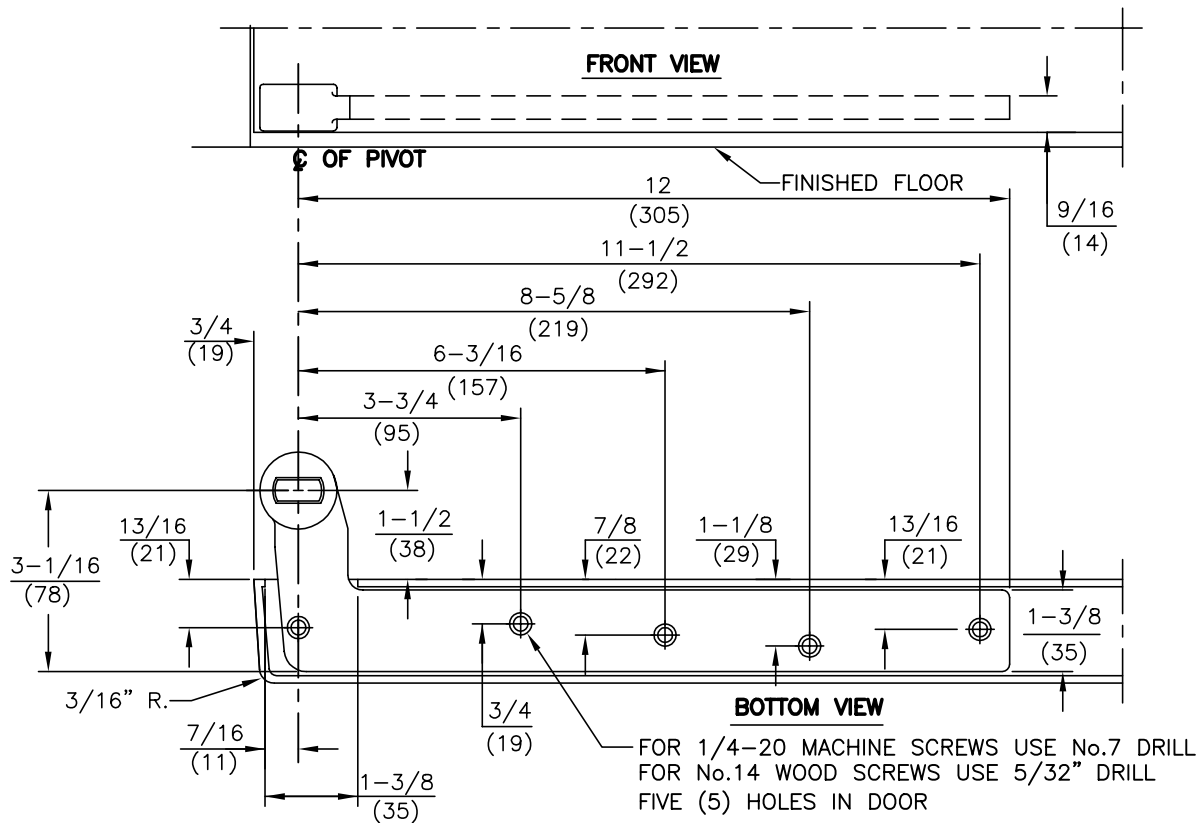
IMPORTANT: If the BTS 80EMB is connected to a fire alarm system, the unit must be tested after installation, by the end user, to be certain that the door closer unit functions properly when the alarm system is activated. The entire system must also be tested periodically after the initial installation test, in conjunction with the testing of the fire alarm system. The end user is also responsible for maintaining the door closing system.

FOR 1/4-20 MACHINE SCREWS USE No.7 DRILL  
 FOR No.14 WOOD SCREWS USE 5/32" DRILL  
 FOUR (4) HOLES PER LEAF



- NOTES**
1. DO NOT SCALE DRAWING.
  2. DIMENSIONS ARE IN INCHES/(MM).
  3. RIGHT HAND DOOR SHOWN.
  4. BEVEL HEEL EDGE OF DOOR 1/8" IN 2".
  5. ALL NECESSARY REINFORCING FOR PIVOT BY OTHERS.

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SPINDLE NO.	CLEARANCE
74003	5/16"
74005	1/2"
74007	5/8"
(STD.) 74010	3/4"
74012	13/16"
74015	7/8"
74020	1-1/8"
74025	1-5/16"
74030	1-1/2"
74035	1-11/16"
74040	1-7/8"
74045	2-1/16"
74050	2-5/16"

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  2. TOP OF CEMENT CASE MUST BE FLUSH WITH FINISH FLOOR LINE.
  3. CEMENT CASE MUST BE LEVEL AND PARALLEL TO FRAME.
  4. INSTALL CEMENT CASE WITH CLOSER CENTERED IN CASE.
  5. 1/2" RIGID CONDUIT BY OTHERS.
  6. 1/8" INSET INSTALLATION SHOWN.
  7. DIMENSIONS ARE IN INCHES/(MM).